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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/709,716

05/24/2004

Chee-Shuen Lee

13225-US-PA

3715

31561

7590

07/20/2006

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE

7 FLOOR-1, NO. 100

ROOSEVELT ROAD, SECTION 2

TAIPEI, 100

TAIWAN

EXAMINER

VO, ANH T N

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/709,716

Applicant(s)

LEE ET AL.

Examiner

Anh T.N. Vo

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-34 and 37-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 38 and 39 is/are allowed.
- 6) ☒ Claim(s) 1-20 and 23-37 is/are rejected.
- 7) ☐ Claim(s) 21 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/30/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

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## **FINAL REJECTION**

The rejection over Cho et al. (US Pat. 6,814,434) is withdrawn in view of the amendments to the claims.

## ***CLAIM REJECTIONS***

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 13-15, 17-19, 23 and 34 are rejected under 35 USC 102 (e) as being anticipated Cho et al (US2004/0041888, S/N=10/459,447).

Cho et al. disclose in Figure 2 an ink cartridge comprising:

- a housing (20) having a substantially sealed space;
- an ink pipe (50) connected to said housing (20), said ink pipe being fluidly linked to said sealed space;
- an ink storage unit comprising a porous material being disposed inside said sealed space and substantially airtightly contacting with an inner wall of a bottom of said housing (20), said ink storage unit being above said ink pipe (50) and having a gap (an unmarked gap) being formed between a filter (50) and the porous material;

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- a portion of said ink storage unit adjacent to said ink pipe (50) having a capillarity larger than other portion of said ink storage unit;
- wherein the filter (60) is disposed on said ink pipe (50); and
- wherein said porous material (25) includes a sponge material.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-12 and 24-33 are rejected under 35 USC 103 (a) as being unpatentable over Cho et al (US2004/0041888, S/N=10/459,447) in view of Narang et al (US5,898,449).

Cho et al. disclose in Figure 2 an ink cartridge comprising all of the limitation of the claimed invention as stated above but does not disclose that the porous material is adhered to or welded to the inner wall of the bottom of the housing as recited in claims 3-6, 9-11 and 24-27, or adhered to the inner wall through a sheet as recited in claims 7, 12 and 28-34.

Nevertheless, Narang et al suggests in Figure 2 an ink cartridge comprising porous material (36) being adhered to the housing wall (25) by an adhesive layer (sheet 38) by heat, lines 45-50, column 7, for securing the porous material into its position on the wall (25).

It would have been obvious to a person having skill in the art at the time the invention was made to adhere the porous material of Cho et al to the bottom wall as suggested by Narang et al for the purpose of securing the porous member into predetermined position to stabilize ink pressure since any movement of the porous member would change the ink pressure.

Noted that, as well known in the art, the porous material can be bonded to a wall by gluing, adhering or ultrasound- welding depending upon the material of the porous member and the wall. A skilled artisan also realizes that the porous member of Cho et al can be directly adhered to the wall or pre-bonded to a sheet in order to minimize the damage for the porous member during heating. Thus, selecting the ultrasound-welding or pre-bonding the porous member is considered to be a matter of a mechanical design expedient for an engineer. Lacking of showing any criticality, it would have been obvious to a person having skill in the art at the time the invention was made to ultrasound-weld the porous member of Cho et al for accommodating with the material of the porous member and the wall, and pre-bond the porous member to a sheet before adhering to the wall for minimize the damage for the porous member.

Claims 16, 18 and 20 are rejected under 35 USC 103 (a) as being unpatentable over Cho et al. (US Pat. US2004/0041888) in view of Haruta et al. (US Pat. 5,182,579).

Cho et al. disclose the basic features of the claimed invention were stated above but do not discloses that a portion of the ink storage unit adjacent to the pipe is heat-pressed.

Haruta et al. disclose in Figures 2 and 7-8 an ink tank (14) comprising said ink storage unit (900 or 7000) is heat-pressed before said ink storage unit (900 or 7000) is disposed inside said sealed space (column 20, lines 28-42).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the teaching of Haruta et al. in the Cho et al. ink cartridge for the purpose of providing an ink absorbent member that attains satisfactory performance at low cost (see column 2, lines 28-32 of Haruta et al. reference).

***Response to Applicant's Arguments***

The applicant's arguments over Cho et al (US 6,814,434) is persuasive without traverse.

***Response to Applicant's Arguments***

The applicant's arguments with respect to the prior art rejection have been carefully considered and have been traversed in view of the new grounds of rejection over Cho et al (US Pub. 2004/0041888) and Narang et al. (US Pat. 5,898,449) references.

***Allowable Subject Matter***

Claims 38-39 are allowed because the prior art references of record fail to suggest an ink cartridge comprising an ink storage unit that has a cave adjacent to an ink pipe in the combination as claimed.

Claims 21-22 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. These claims would be allowable because the prior art references of record fail to suggest the belt inserted into the storage unit to tighten the bottom of the storage in the combination as claimed.

***CONCLUSION***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262. The examiner can normally be reached on Tuesday to Friday from 9:00 A.M. to 7:0 P.M..

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The fax number of this Group 2861 is (571) 273-8300.



ANH T. N. VO  
PRIMARY EXAMINER  
July 17, 2006